On Page 57, delete all text under the heading "ABSTRACT OF THE DISCLOSURE" and replace with the substitute "ABSTRACT OF THE DISCLOSURE" attached hereto on a separate page.

IN THE CLAIMS:

Please cancel claim 1-21 and add the following claims:

22. A computer control system comprising:

a plurality of communication ports configured to facilitate communication between said control system and a plurality of computer systems;

at least one control system output port configured to facilitate communication between said control system and at least one output device;

at least one control system input port configured to facilitate communication between said control system and at least one input device; and

a processing system which includes at least two processors to facilitate monitoring and control of said plurality of computer systems by said at least one output device and said at least one input device.

23. The control system of claim 22, wherein said communication ports are keyboard-video-mouse (KVM) ports, configured to connect to KVM cables.

24. The control system of claim 22, wherein said control system output port is configured to communicate with a video display.

25. The control system of claim 22, wherein said control system output port is configured to communicate with a printer.

26. The control system of claim 22, wherein said control system input port is configured to communicate with a keyboard.

27. The control system of claim 22, wherein said control system input port is configured to communicate with a keypad.

28. The control system of claim 22, wherein said control system input port is configured to communicate with a mouse.

29. The control system of claim 23, wherein each processor controls two KVM ports.

30. The control system of claim 22, wherein said at least two processors includes at least one port processor and at least one main controller processor for processing input data signals between said plurality of computer systems and said control system, wherein said input data signals are communicated between at least one input port and said main controller processor.

31. The control system of claim 30, wherein said input data signals are from at least one of the following devices: a keyboard, a mouse, a pointer device, a keypad, a stylus.

32. The control system of claim 31, said processing system further comprising:

flash memory configured to facilitate communication of said input data signals;

a programmable logic device; and

non-volatile random access memory (NVRAM) associated with said programmable logic device to facilitate the communication of said input data signals from said control system to at least one of said plurality of computer systems.

33. The control system of claim 30, further comprising an output switch configured to facilitate communication of said output data signal to said output port.

34. The control system of claim 33, wherein said output data signal is a video signal.

35. The control system of claim 34, wherein said output switch is a video switch.

36. The control system of claim 33, further comprising:

an output programmable logic device configured to facilitate the communication of output data signals between said communication ports and said output ports;

at least one transceiver; and

a host controller processor in communication with said main controller processor to direct output signal data to at least one transceiver.

37. A method for processing data signals from a plurality of computers comprising the steps of:

receiving output data signals from a plurality of computer systems;

receiving input data signals from at least one input device;

processing said output data signals and said input data signals with at least two processors, wherein said output data signals are directed to an output device and said input data signals are directed to said plurality of computer systems; wherein said processors are configured to identify which input data signal is associated to which one of said plurality of computer systems and which output data signal originated from which one of said plurality of computer systems.

38. The method of claim 37, further comprising the step of communicated said output data signals and said input data signals between said plurality of computer systems and a computer control system via a keyboard-video-mouse (KVM) cable connected to one of several communication ports on said computer control system and pointer-device ports, keyboard ports and video ports on each of said plurality of computer systems.

39. The method of claim 37, further comprising the step of displaying said output signals from said plurality of computer systems on a video monitor connected to said computer control system.

40. The method of claim 37, wherein said input data signals comprise keyboard signals.

41. The method of claim 37, wherein said input data signals comprise signals from a pointer device.

42. The method of claim 37, further comprising the step of processing multiple output data signals from a plurality of computer systems and multiple input data signals directed to a plurality of computer systems in a real-time environment.

43. A computer rack station comprising:

a housing unit configured to rigidly attach a control system to said computer rack station;

wherein said control system facilitates communication between said control system and a plurality of computer systems; and

a slidably mounted input and foldable display system capable of moving from a closed position to an operating position, wherein said input and display system is configured to communicate with said control system.

44. The computer rack station of claim 43, wherein said foldable display is configured to fold down upon said input system in a closed position so as to protect said input system against damage.

45. The computer rack station of claim 43, wherein said input system comprises a keyboard.

46. The computer rack station of claim 45, wherein said input system comprises a pointing device.

47. The computer rack station of claim 43, wherein said input system further comprises a keyboard, a pointing device, and a video display.

48. A control and monitoring system for a plurality of computers comprising:

(a) a keyboard-video-mouse switch comprising a plurality of first connectors, each of which is connected to:

(b) a keyboard-video-mouse cable comprising:

(i) a first end comprising a second connector for connecting into said keyboard-video-mouse switch; and

(ii) a second end comprising:

(1) a third connector for connecting into a keyboard port of a computer,

(2) a fourth connector for connecting into a pointing device port of said computer, and

(3) a fifth connector for connecting into a video port of said computer, whereby said keyboard-video-mouse cable carries keyboard signals, pointing device signals, and red, green, blue, vertical sync, and horizontal sync video signals between said computer and said keyboard-video-mouse switch without modifying said computer or adding one or more devices to said computer.

49. A control and monitoring system for a plurality of computers comprising:

(a) a keyboard-video-mouse switch in a stationary configuration; and (b) an input and display device comprising:

(i) a base housing comprising a keyboard and pointing device and

(ii) a display housing pivotably connected to the base housing in a configuration such that the display housing covers and protects the base housing when in a closed position, wherein said input and display device is in slidable communication with said keyboard-video-mouse switch and whereby said input and display device may be stored or

extended to an open position while said keyboard-video-mouse switch remains in a fixed position, reducing the likelihood of a cable being pulled loose by a human operator during an extending or storing operation.

50. The control and monitoring system of claim 49 wherein said input and display device has a maximum vertical height of 1.75 inches when in a stored position.

51. The control and monitoring system of claim 49 further comprising an arm comprising a plurality of hinges and a first end joined to said input and display device and a second end joined to said keyboard-video-mouse switch, wherein cables connected between said input and display device and said keyboard-video-mouse switch may be fastened to said arm to minimize the possibility of cable pinching as a human operator slides the input and display device mounted in a computer equipment rack from a storage position to an open position.

52. The control and monitoring system of claim 49, wherein said second connector comprises a fifteen position D-sub connector and each of said plurality of first connectors comprises a fifteen position D-sub connector.

53. The control and monitoring system of claim 49, wherein said second connector comprises a fifteen position DB 15 connector and each of said plurality of first connectors comprises a DB 15 connector.

54. The control and monitoring system of claim 49, wherein the plurality of first connectors comprises at most sixteen connectors.

55. A control and monitoring system comprising:

(a) a plurality of first processors for processing keyboard and pointing device signals from a plurality of computers, wherein each first processor interfaces to not more than two computers; and

(b) a second processor operatively connected to a character input device and a pointing device and electrically connected to each of said plurality of first processors, for processing keyboard signals from said character input device and pointing device signals from said pointing device to each of said plurality of first processors; and

(c) a first programmable logic device electrically connected to said second processor; and

(d) a non-volatile random access memory electrically connected to said second processor and to said first programmable logic device; and

(e) a video driver connected to a second programmable logic device and to said second processor, for displaying an onscreen menu or a set of video signals from each of said plurality of computers; and

(f) a video switch connected to said second processor, for receiving a plurality of red, green, blue, horizontal and vertical sync video signals from each of said plurality of computers and passing each of said plurality of red, green, blue, horizontal and vertical sync video signals to said video driver.

56. The system of claim 55 wherein said video driver means comprises:

(a) an on screen graphics display circuit, for generating text and graphics for an on screen menu; and

(b) an on screen graphics overlay circuit coupled to said on screen graphics display circuit and said video switch; and

(c) a plurality of first op-amp amplifying circuits coupled to said on screen graphics overlay circuit, one each for each of a plurality of red video signals from said on screen graphics overlay circuit; and

(d) a plurality of second op-amp amplifying circuits coupled to said on screen graphics overlay circuit, one each for each of a plurality of green video signals from said on screen graphics overlay circuit; and

(e) a plurality of third op-amp amplifying circuits coupled to said on screen graphics overlay circuit, one each for each of a plurality of blue video signals from said on screen graphics overlay circuit; and

(f) a first signal splitting circuit coupled to said video switch, for passing a plurality of vertical sync signals from said programmable logic means; and

(g) a second signal splitting circuit coupled to said video switch means, for passing a plurality of horizontal sync signals from said logic means,

whereby a plurality of video display devices may be sent video signals to drive said plurality of video display devices.

57. The system of claim 55 wherein said each of said plurality of first processors comprises a microcontroller.

58. The system of claim 55 wherein said second processor comprises a microcontroller.

59. The system of claim 55 further comprising:

(a) a plurality of first connectors connected to said video driver, for a plurality of video display devices viewable by a human operator; and

(b) a plurality of second connectors connected to said second processor, each of said plurality of third connectors may be connected to one of a plurality of character input devices which said human operator can use to send a series of characters to said second processor means; and

(c) a plurality of fourth connectors connected to said second processor, whereby each of said plurality of fourth connectors may be connected to one of a plurality of pointing devices which said operator can manipulate to point to any location on one of said plurality of video display means.

60. The system of claim 55 further comprising:

(a) a third processor electrically connected to said first processor, for uploading and downloading programming and data and processing commands from a remote computer; and

(b) said second programmable logic device electrically connected to said third processor, said video switch, and said video driver; and

(c) a communications interface connected to said third processor, for providing commands, programming, and data to said third processor from said remote computer,

whereby said remote computer may send commands and upload and download programming and data to said third processor.

61. The system of claim 60 wherein said first programmable logic device comprises a Complex Programmable Logic Device; and said second programmable logic device comprises a Complex Programmable Logic Device.

62. The system of claim 60 wherein said communications interface comprises:

(a) a Transmitter/Receiver connected to said third processor for receiving data and transmitting data between said third processor and a remote computer,

whereby said third processor receives commands, programming, and data from said remote computer and transmits programming and data to said remote computer.

63. A control and monitoring system for a plurality of computers comprising:

(a) a first keyboard-video-mouse switch; and

D1 Cont'd

(b) at least one second keyboard-video-mouse switch;

(c) a first Transceiver coupled to said first keyboard-video-mouse switch for transmitting and receiving differential data signals between said first keyboard-video-mouse switch and said second keyboard-video-mouse switch;

(d) a second Transceiver coupled to said first keyboard-video-mouse switch for receiving and transmitting differential data signals between said first keyboard-video-mouse switch and said second keyboard-video-mouse switch;

(e) a third Transceiver coupled to said first keyboard-video-mouse switch for asserting and receiving differential clock signals between said first keyboard-video-mouse switch and said second keyboard-video-mouse switch;

C2 Cont'd

(f) a fourth Transceiver coupled to said second keyboard-video-mouse switch for transmitting and receiving differential data signals between said second keyboard-video-mouse switch and said first keyboard-video-mouse switch;

(g) a fifth Transceiver coupled to said second keyboard-video-mouse switch for receiving and transmitting differential data signals between said second keyboard-video-mouse switch and said first keyboard-video-mouse switch;

(h) a sixth Transceiver coupled to said second keyboard-video-mouse switch for asserting and receiving differential clock signals between said second keyboard-video-mouse switch and said first keyboard-video-mouse switch; and

(i) a daisy chain cable comprising:

(1) a first end connected to said first keyboard-video-mouse switch, and

(2) a second end connected to one of said second keyboard-video-mouse switch on the other end,

wherein a plurality of control and monitoring systems may communicate with each other.

64. The system of claim 63 wherein said daisy chain cable comprises:

(a) a first head comprising a connector, for connecting into said first keyboard-video-mouse switch; and

(b) a second head in comprising a connector, for connecting a terminator or a communications cable for a computer; and

(c) a third head comprising a connector, for connecting into said second keyboard-video-mouse switch; and

(d) a fourth head comprising a connector, for connecting into said first connector of another daisy chain cable or a terminator,

wherein said first head is connected to said second head; and said second head is connected to said third head; and said third head is connected to said fourth head; and whereby a plurality of control and monitoring systems may be daisy chained together.